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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,741	11/13/2001	Takehiro Ikeda	15689.90	3553

22913 7590 05/05/2005

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EXAMINER

NGUYEN, HUY D

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/054,741

Applicant(s)

IKEDA ET AL.

Examiner

Huy D Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-7,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Blakeney, II et al. (US Patent No. 5,267,261).

Regarding claims 1, 7, 13, Blakeney, II et al. teaches a mobile communication system including: a plurality of base stations, a network control station conceptually located above said plurality of base stations and mobile stations receiving signals from said plurality of base stations, said mobile communication system characterized in that: said mobile station determines to which base stations the mobile station is to be connected in order to satisfy a downlink receiving quality desired by the mobile station (see column 5, lines 60-61) and notifies said network control station of the desired base stations to which the mobile station is to be connected, said network control station transmits a duplicated information signal to said desired base stations in order to allow a mobile station to simultaneously communicate with at least two base stations (e.g., in soft handoff, mobile stations communicate simultaneously with multiple base stations – see column 8, lines 47-58), and said mobile station receives and synthesizes signals transmitted by the plurality of base stations to control the downlink receiving quality (see column 5, lines 57-63; Column 8, lines 47-58).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney, II et al. in view of Rauscher (US Patent No. 6,633,762).

Regarding claims 3, 9, 14, Blakeney, II et al. teaches a mobile communication system according to claim 1, further comprising: quality control means coupled to said network control station and communication with the mobile stations: wherein said mobile station notices said quality control means of the downlink receiving quality (e.g., predetermined level of signal strength) desired by the mobile station, said quality control means determines to which base stations the mobile station is to be connected in order to satisfy said downlink receiving quality and notifies said network control station of the desired base stations to which the mobile station is to be connected (see Abstract).

Blakeney, II et al. does not teach that mobile station notices said quality control means of the location of the mobile station.

However, the preceding limitation is taught in Rauscher (see Fig. 3; column 6, lines 34-36).

It would have been obvious to one having ordinary skill in the art, at the time of the invention, to apply the teaching of Rauscher to the teaching of Blakeney, II et al. in order to reduce the computational load on the serving base station.

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5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney, II et al. in view of Rauscher and in further view of Savolainen (U.S. Patent No. 6,438,377) and Butovitsch et al. (U.S. Patent No. 6,259,927).

Regarding claims 5, 11, the combination of Blakeney, II et al. and Rauscher teaches the mobile communication system according to claim 3 except for means for identifying base stations to which said mobile station is to be connected in order to satisfy the desired uplink receiving quality in such a manner that the transmittable maximum power of said mobile station is not exceeded.

However, the preceding limitation is taught in Savolainen (see abstract and column 3, lines 25-36).

It would have been obvious to one having ordinary skill in the art, at the time of the invention, to apply the teaching of Savolainen to the teaching of Blakeney, II et al. and Rauscher in order to rapidly determine the best target cell for handover even in very difficult environments.

The combination of Blakeney, II et al., Rauscher, and Savolainen fails to teach means for requesting the base stations and said network control station to receive and synthesize a signal from said mobile station and designating transmission power that is to be used by said mobile station, and said mobile station transmits information using said designated transmission power, and the network control section synthesizes signals received by the base stations to control the uplink receiving quality.

However, the preceding limitation is taught in Butovitsch et al. (see column 1, lines 44-59).

It would have been obvious to one having ordinary skill in the art, at the time of the invention, to apply the teaching of Butovitsch et al. to the teaching of Blakeney, II et al. Rauscher, and Savolainen in order to obtain optimal interference level and system capacity.

6. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney, II et al. in view of Rauscher and in further view of Kang et al. (U.S. Patent No. 5,781,861).

Regarding claims 6, 12, the combination of Blakeney, II et al. and Rauscher teaches the mobile communication system according to claim 3 except that said quality control means has means for measuring traffic in cells surrounding a cell in which said mobile station is present and means for requesting the network control station to transmit a duplicate signal to one or more stations, if any, which have a lower measured traffic and which can transmit information to said mobile station communicating in an adjacent cell, and said mobile station receives and synthesizes signals from base stations that have been communicating with the mobile station and from the one or more base stations, thereby improving the downlink receiving quality.

However, the preceding limitations are taught in Kang et al. (Col. 2, lines 26-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Kang et al. to the teaching of Blakeney, II et al. and Rauscher in order to reduce heavy traffic load in a cell.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 703-306-0003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fw

Huy Nguyen  
04/27/2005

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**